

# 1. Introduction

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# 1. Introduction

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The CALFED Bay-Delta Program (CALFED or Program) is an open, collaborative, state-federal-stakeholder effort seeking to develop a comprehensive long-term plan to restore ecosystem health and improve water management for beneficial uses of the Bay-Delta system. Water transfers can play an important role in achieving that goal. As one of eight specific programs of the Preferred Program Alternative, the Water Transfer Program is part of an integrated solution designed to address the co-equal Program purposes of ecosystem restoration, water quality, water supply reliability, and levee and channel integrity.

The Program's Water Transfer Program proposes a framework of actions, policies, and processes that, collectively, will facilitate water transfers and the further development of a state-wide water transfer market. Because water transfers can affect third parties (those not directly involved in the transaction) and local groundwater, environmental, or other resource conditions, the framework also includes mechanisms to provide protection from such impacts.

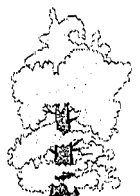
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**PURPOSE:** To provide a framework of actions, policies, and processes to facilitate, encourage, and streamline a properly regulated and protective water market which will allow water to move between users, including environmental uses, on a voluntary and compensated basis.

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The rest of this document describes the Water Transfer Program in more detail, including:

- A description of the relationship of water transfers to other water management actions and programs,
- A discussion of existing laws and statutes that govern water transfers,
- Identification of issues related to water transfers,
- A plan to resolve these issues, and
- Strategies to implement the plan.



## 1.1 WHY CALFED HAS INCLUDED WATER TRANSFERS IN THE PREFERRED PROGRAM ALTERNATIVE

As one of eight Program components developed during CALFED's Phase II process, the Water Transfer Program is, by definition, common to all alternatives. Thus, it is part of the Preferred Program Alternative.

During the CALFED Program's public process, it was apparent that the issue of "water transfers" needed to be addressed. Many stakeholders share the opinion that an improved water market could help "reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system," a stated objective of the Program. Others are skeptical, concerned that water transfers are a "water grab" by those searching for new water supplies. Opinions about water transfers and a statewide water market vary widely, even within agricultural and urban water users, environmental groups, and local, source area interest groups.

The question of how the CALFED Program should approach water transfer issues was presented to the Bay-Delta Advisory Council (BDAC) for policy advice. BDAC concurred that water transfers are an appropriate and useful part of the CALFED water management strategy. BDAC members expressed the need for the CALFED Program to consider several transfer issues, including third-party impacts, protection of water rights, and the roles of water rights holders and water users in the review and approval process for transfers.

## 1.2 THE ROLE OF WATER TRANSFERS IN WATER MANAGEMENT

Active management of California's water resources is a necessary part of providing the State's numerous water resource benefits—from flood control to recreation and from in-stream flows for fish to water for agriculture and urban communities. Many tools are

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### ROLE AND FUNCTION OF THE BDAC WATER TRANSFER WORK GROUP

At the May 22, 1997 meeting, Chairman Madigan announced the appointment of a Bay-Delta Advisory Council (BDAC) Water Transfer Work Group to consider the policy issues related to transfers and the appropriate role of CALFED in developing a water transfer policy/water market framework. The Work Group was co-chaired by Tib Belza and Roger Strelow.

The Work Group held a series of meetings to identify issues, consider case studies, develop solution options, and provide guidance to CALFED staff in the development of policy recommendations for BDAC and CALFED agencies. As of January 1999, BDAC declared that this group had accomplished its objective and retired the group.

### ROLE AND FUNCTION OF THE TRANSFER AGENCY GROUP

A group of CALFED agency staff members has worked together to identify and discuss solutions for issues identified by the Work Group that are more technical or operational in nature. This group worked with the BDAC work group to ensure agency and stakeholder participation in developing viable solution options. This group has continued to meet and develop proposed solutions to several issues. Facilitated meetings with stakeholders and the group to develop consensus on the proposals will be held early in the Stage 1 implementation phase.

available to help manage our water, such as dams, reservoirs, canals, and pumps. Other important water management tools, such as water conservation, water recycling, and conjunctive use, also play ever-growing roles. Less obvious is the utility in the management of this resource of such tools as the CALFED Ecosystem Restoration Program and the Levee System Integrity Program. Water transfers round out this array of water management tools by working in conjunction with the other tools. It is important to note, however, that water transfers are simply **mechanisms to move** water and **not sources** of water.

Whether water is saved by conservation of losses to a salt sink, released from a reservoir, or made available through land fallowing, it is the “transfer” that allows the water to move between uses. The transfer does not generate the water. For example, a water conservation program may make water available for another’s use, but it is the transfer that actually allows the conserved water to move to the other use.

Water transfers are not efficiency improvements, but they may encourage more efficient use of water and produce revenue to be used for investing in improvements. While it is not a CALFED objective to increase the economic efficiency of water in the sense of causing water to move from relatively lower value uses to relatively higher value uses per unit of water, a more efficient water transfer market probably will result in some degree of increased economic efficiency. As some water gravitates by market force to uses of greater economic value, increased economic efficiency automatically will occur. However, this increase will depend totally on the willingness of buyers and sellers to reach agreements in a “market” atmosphere.

Water transfers serve two major water management functions (both of which involve moving water made available through a number of methods, including but not limited to, reduction in consumptive use, conservation of losses, conjunctive use, land fallowing, and reservoir reoperation). These functions are:

- ***Providing a mechanism to obtain a temporary source of water during conditions when other sources of water are constrained.*** In this manner, the transfer helps improve water supply reliability for the receiving interest. Typically, such water transfers are for short periods of time, not occurring every year (short-term).
- ***Providing a mechanism to augment existing sources of water to meet existing or projected unmet demands.*** In this manner, the transfer provides a new water supply to a receiving interest while reducing the long-term quantity available to the seller. Typically, a water transfer of this type is a long-term reallocation of water, either permanent or for a period of years (long-term).

These functions apply to all types of water use: agriculture, urban, or the ecosystem. In addition to these primary functions, transfers can provide benefits such as:

- Helping to relieve the mismatch between water supply and demand by moving water available in one area to satisfy a need in another area.
- Providing a mechanism to move water assets into and out of a proposed Environmental Water Account (EWA).
- Providing a short-term method to move existing supplies from one location to another while other facilities are being constructed (new conveyance, surface

storage, or conjunctive use), during temporary reductions in water supply due to outages of conveyance facilities, or while new technologies are being developed (e.g., desalination).

- Moving water from storage facilities (surface and subsurface) to various uses throughout the state, including in-basin needs, in-stream flows for the environment, and exports.
- Providing water quality benefits as a result of actions taken to make water available for transfer (reducing agricultural return flows and reducing urban wastewater flows) - although, in some cases, degradation of water quality also can occur.
- Providing water for in-stream flow augmentation through actions such as fallowing, conservation, and conjunctive use.

### 1.2.1 RELATIONSHIP TO OTHER PROGRAMS

As previously stated, the water transfer framework is one of several water management tools included in the Preferred Program Alternative. Each of these tools is linked to the other, resulting in overall management improvements. The following provides a basic description of these relationships.

#### *Linkage to Storage, Conveyance, and Conjunctive Use*

One potential source of transferrable water is water stored in surface or subsurface storage facilities. The CALFED Program views appropriate and effective integration of groundwater and surface water as an essential component of water management. Local development of conjunctive use facilities and modified operations of existing reservoirs can generate water that can be transferred to other beneficial uses (assuming that all other legal requirements for transferrable water are satisfied).

However, water transfers cannot substitute for increases in new water supply in the Bay-Delta system. Current storage capacity may not be sufficient to solve water supply and reliability problems, particularly with respect to transfers of water across the Delta. Furthermore, increasing demand in source areas may limit the amount of water made available for transfer. Since available storage space is critically linked to conveyance capacity, a lack of storage may negatively affect the amount of water that can be transferred. For instance, water conserved over the course of an irrigation season that is to be transferred across the Delta may need to be held in surface or groundwater storage until a window of opportunity exists to convey the water. Traditionally, these windows occur late in the water delivery season (i.e., August through November).

Operational constraints on Delta export facilities, coupled with the present levels of storage, will continue to limit cross-Delta water transfer opportunities. Thus, transfers will function optimally only when the amount of storage available in the system is substantially increased, the Delta export conveyance mechanisms are changed, or both. Without increased storage

upstream of the Delta or in export areas and relief from current pumping constraints, water transfers will play only a modest role in state-wide water management.

Additional conjunctive use and groundwater banking opportunities are one method to increase available storage. These projects most likely would be implemented by local entities. Transfers of water developed under new conjunctive use or banking programs would be subject to the actions, policies, and processes recommended in this framework.

## ***Linkage to Conservation and Recycling***

In addition to the linkage between storage and water transfers, there is a linkage between water use efficiency and transfers. One of the assurance mechanisms proposed for the agricultural and urban water use efficiency programs is that local water agencies have approved or certified water management plans in place as a condition of obtaining transferred water through new facilities, or possibly as a condition of obtaining approval from CALFED agencies for transfers using existing federal or state storage and conveyance facilities (refer to Chapter 2 of the Water Use Efficiency Program Plan). The premise of this assurance mechanism is that a water agency should be required to demonstrate that it is efficiently using its existing water supply before buying or selling supplemental water in what is generally considered to be a water-scarce environment.

A corollary to this premise is that the revenue produced by the sale of transferrable water can be used for additional water use efficiency improvements. Thus, while transfers are not *per se* an efficiency mechanism, water transfers can provide financial incentives for efficiency improvements, which can generate transferrable water in some instances. For example, a water transfer based on the temporary fallowing of a particular field will produce revenue that could be used to improve the irrigation systems on that same field for when it is brought back into production.

The linkage between water transfers and water conservation is complicated by issues of defining when conserved water is transferrable. As discussed in Section 3, some stakeholders and CALFED agencies disagree regarding when and how much conserved water is transferrable under what conditions. Resolution of this issue is a key component of the Water Transfer Program.

## ***Linkage to Ecosystem Restoration***

The CALFED Preferred Program Alternative will include actions to acquire water for augmenting existing in-stream flows. It is assumed that a portion of these flows will be derived through water transfers from willing sellers. Such transfers will directly help achieve ecosystem restoration goals. However, even water transfers between agricultural interests and from agriculture to urban interests have the potential to provide added in-stream benefits. Details of proposed water acquisitions for in-stream flow purposes are included in the Ecosystem Restoration Program report.

The acquisition of water for in-stream flow purposes generally will occur through purchase by a federal or state agency. Currently, a program to acquire water for environmental uses is being developed by the Ecosystem Roundtable. To assist in this process, the Ecosystem

Roundtable has drafted a set of "Water Transfer Principles." These principles were modeled after the recommendations of this Water Transfer Program Plan. All in-stream or environmental water transfers will be subject to the same criteria and conditions as any other water transfer.

### **1.3 PROGRAMMATIC NATURE OF THE WATER TRANSFER FRAMEWORK**

The framework presented here to resolve water transfer issues is programmatic. It describes actions, policies, and processes, but only in sufficient detail to convey the direction and general purpose of each. More detail will need to be developed prior to successful implementation of this framework. Complete development of the framework will continue during the months and years after the Record of Decision on the Programmatic EIS/EIR.